

The Category of Mood in Korean

Transformational Grammar

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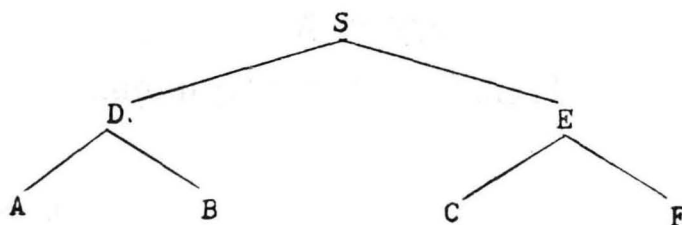
The theory of grammar has been so developed that the time has come for us not to be able to consider as the rules of the language under question those rules which are capable of generating strings of formatives containing only correct linear structures. For anyone who has some interest in the structure of natural languages knows that a human language possesses, besides its linear structure, hierarchical structure, too. It is quite often for linguists to overlook the hierarchical structure of a sentence, due to their too much attention to its linearity. I do not mean that linguists consider the linear structure more important than the hierarchical structure, but quite often they fail to write a *transformational rule* in such a way that it produces not only linearly correct strings of formatives but also strings of formatives which have correct hierarchical structures. By way of clarification, let us consider the following hypothetical transformational rule:

(1) A B C X
 1 2 3 4 ...→
 1 2 K 3 4

The rule given above is interpreted as asserting that any string of formatives falls under the domain of the rule (1) just in case it can be completely segmented into four consecutive substrings such that the first substring is *an* (member of the constituent or category sequence) A, the second is a B, the third is a C, and the fourth is anything at all including null element. Thus, the tree diagram (2) contains a structure which falls under the domain of the transformation (1).

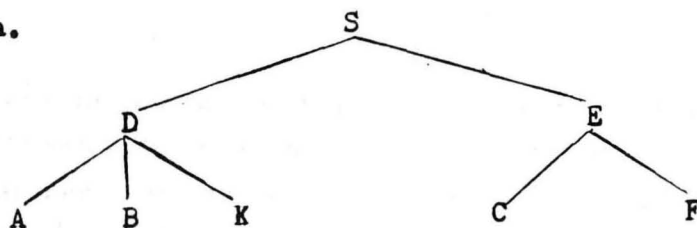
No one in the world is able to say what the correct output structural tree is going to be, when (1) is applied to (2). Any of the three tree diagrams in (3) could be it. Note that, even though all three tree diagrams in (3) have different hierarchical structures, they have the same linear structure A+B+K+C+F. What is wrong with a transformational rule like

(2)

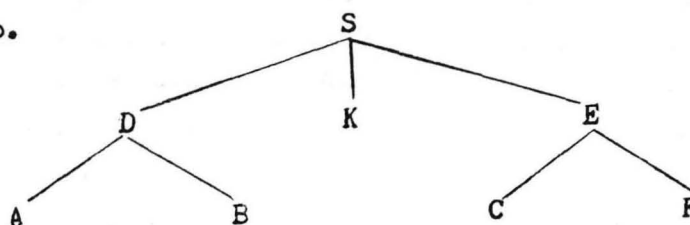


(3)

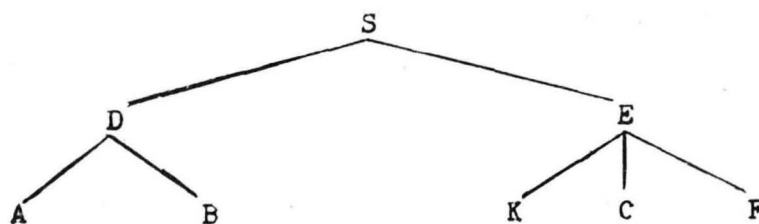
a.



b.



c.



(1) is that we cannot give a unique interpretation to it.

It is well-known that the role of a transformational rule in the generative grammar of a language is to map a phrase marker onto another, but not just to give some change to the linear structure of strings of formatives. What we have to bear in mind is that a phrase marker, either underlying or derived, contains the information not only about the linear structure of a certain linguistic object but also about its hierarchical structure as well as the constituent types it involves.

Another important property of a transformational rule is that it must show a *linguistically significant generalization* of the language. Here again, let us consider a hypothetical example:

let us suppose that there are two linguistic processes which seem unrelated superficially. And, furthermore, let us suppose that 'I' explain these two phenomena separately with two independent, totally unrelated rules, whereas 'you' explain them with a single rule. It goes without saying that the latter offers a better explanation to them.

There have been a number of transformational descriptions of Korean. It seems to me, however, that most of the descriptions have been attempted without considering their effects on and relations to the over-all grammar of the language. The majority of the rules suggested in them rarely show any linguistically significant generalizations about the Korean language. Moreover, it is quite easy to find the kind of transformational rules which invite ambiguous interpretations as the hypothetical rule (1) does.

For the rule (1) to be applied to the tree diagram (2) and then derive a unique output structure from it, the rule should be revised in such a way that it shows that the newly introduced element 'K' is to be attached either as a right sister of B or as a left sister of C or otherwise. Suppose that we want to derive (3a) from (2). Then, the rule should be revised as follows:

(4)	A	B	C	X	
	1	2	3	4	...→
	1	2+K	3	4	

The purpose of the present paper is to discuss how we should treat the category of 'mood' in Korean: that is, whether it should be introduced in the transformational component, or it should be generated in the base component of the grammar, and to show the advantage of introducing it by a transformational rule. By the *category of mood*, we mean the four sentence endings, namely, *declarative, imperative, interrogative, and propositive*.

I. Previous Analysis

The category of mood, which has been one of the most troublesome, but never seriously discussed, elements in any transformational descriptions of Korean, has been exclusively introduced into a phrase marker by a base rule (cf. Lee 1966, Park 1967, and Song 1967.) It is, however, quite understandable, because we are just beginning to apply the theory of generative grammar for the analysis of the language, and most of the previous analyses barely go beyond discussing the simple, fundamental sentence patterns of the Korean language.

Here, I shall point out several problems arising in connection with the category of mood

which is introduced by a base rule. For the sake of argument, let us suppose that the grammar of the language contains the following two base rules.

(5) $S \cdots \rightarrow NP VP Mood$

(6) $Mood \cdots \rightarrow \left\{ \begin{array}{l} \text{Declarative} \\ \text{Interrogative} \\ \text{Imperative} \\ \text{Propositive} \end{array} \right\}$

As a matter of fact, all transformational analyses of the language carried out previously possess the base rules which are more or less similar to those given above.

The rules assert that all the sentences in the language must end in one of the four sentence endings: 'declarative' 'interrogative,' 'imperative,' and 'propositive.' We may not find, *prima facie*, anything wrong with the analysis illustrated in (5) and (6), because, granted that the language under question has only four sentence types, the sentences of the language can exhaustively be subdivided into four subcategories. Note, however, that the rules (5) and (6) also assert a string of formatives, if it is dominated by an S, must always contain one of the four sentence endings as its last element.

First of all, let us examine the co-occurrence constraints of the imperative sentence ending *ela* and the propositive sentence ending *ca* with their subject noun phrases.

(7) a. *ney-ka ka-la.*

네가 가라.

'you go!'

b. **uwli-ka ka-la.*

*우리가 가라.

'We go!'

(8) a. *uwli-ka ka-ca.*

우리가 가자.

'Let's go.'

b. **ney-ka ka-ca.*

*네가 가자.

'Let you go.'

The previous transformational descriptions of the language present the following rules whose sole purpose is to generate grammatical strings such as (7a) and (8a), and at the same time to block the ungrammatical strings such as (7b) and (8b).

(9) $NP \cdots \rightarrow ney / \text{---} \cdots ela$ (Lee 1966: 8)

- (10) NP \rightarrow IPrN+Pl / ____ VP+P (Song 1967: 161)

where IPrN stands for the first person pronoun, pl for the plural marker and P for the propositive sentence ending *ca*.

Note that (9) and (10) state that only the second person pronoun *ney* 'you' can be the subject of the sentence which ends in the imperative sentence ending *ela*, and that only the first person plural pronoun can become the subject of the propositive sentence which ends in *ca*. The problem arises, however, from the fact that the Korean language, like other natural languages, does not consist of solely simple sentences. It is quite easy to refute the validity of (9) and (10) as the rules of the language as well as their power of linguistic generalization.

Let us consider slightly more complex sentences like (11) and (12).

- (11) *nay-ka Chelsuw-eykey ka-la-ko myenglyenghay-t-ta.*

내가 철수에게 가라고 명령했다.

'I ordered Chelsuw to go.'

- (12) *nay-ka Chelsuw-eykey ka-ca-ko ceyanhay-t-ta.*

내가 철수에게 가자고 제안했다.

'I suggested to Chelsuw that we (I and Chelsuw) go.'

It is immediately clear from (11) and (12) that the rules (9) and (10) are not the correct generalization of the grammatical usage of the imperative sentence ending *ela* and the propositive sentence ending *ca*. That is to say that the rules given above result from the superficial observations of the language.

In (11) the deep subject of *ka-la* is not the second person pronoun *ney* 'you', as the rule (9) indicates, but the third person noun phrase *Chelsuw*. In (12) the underlying subject *ka-ca* is not the first person plural pronoun, as the rule (10) asserts, but *nay* 'I' and *Chelsuw*. It is obvious then that rules like those given above are unable to account for the occurrence of the imperative sentence ending *ela* and the propositive sentence ending *ca* in the embedded sentences of (11) and (12). Furthermore, the rules (9) and (10) state that the following strings of formatives should be grammatical.

- (13) **nay-ka Yengho-eykey ne-ka ka-la-ko myenglenghay-t-ta.*

*내가 영호에게 네가 가라고 명령했다.

'I ordered Yengho that you go.'

- (14) *Yengho-ka Chelsuw-eykey uwli-ka ka-ca-ko ceyanhay-t-ta.*

*영호가 철수에게 우리가 가자고 제안했다.

'Yengho suggested to Chelsuw that we go.'

Two questions may be raised concerning this problem: (a) is there any legitimate evidence that we can call the embedded sentences of (11) and (12) an imperative sentence and a propositive sentence, respectively?; (b) if they are really an imperative sentence and a propositive sentence, isn't it possible to derive all indirect discourses such as (11) and (12) from their appropriate direct discourses?

In regard to the question (a), let us consider the negative morpheme *mal* which can occur only in an imperative sentence and in a propositive sentence. Therefore, the sentences (15b) and (16b) whose embedded sentences contain the negative *ani*, which occurs only in a declarative sentence and an interrogative sentence, are ungrammatical.

- (15) a. *nay-ka chelsuw-eykey ka-ci mal-la-ko myenglyenghay-t-ta.*

내가 철수에게 가지 말라고 명령했다.

'I ordered Chelsuw not to go.'

- b. **nay-ka Chelsuw-eykey ka-ci ani-ha-la-ko myenglyenghay-t-ta,*

* 내가 철수에게 가지 않으라고 명령했다.

'I ordered Chelsuw not to go.'

- (16) a. *Yengho-ka Chelsuw-eykey ka-ci mal-ca-ko ceyanhay-t-ta.*

영호가 철수에게 가지 말라고 제안했다.

'Yengho suggested to Chelsuw that they not go'.

- b. **Yengho-ka Chelsuw-eykey ka-ci ani-ha-ca-ko ceyanhay-t-ta.*

*영호가 철수에게 가지 아니하자고 제안했다.

'Yengho suggested to Chelsuw that they do not go.'

Suppose that we regard the embedded sentences of (11) and (12) as 'declaratives.' Then, there is no natural way of explaining not only the special negative *mal* in (15a) and (16a) but also the appearances of the imperative sentence ending *ela* in (11) and (15a) and the propositive sentence ending *ca* in (12) and (16a). However, when we consider the embedded sentence of (11) is an imperative sentence, and that of (12) a propositive sentence, it is rather unnatural for them not to contain the special negative morpheme *mal* and the imperative sentence ending *ela* or the propositive sentence ending *ca*.

As to the second question (b), let us consider the sentences in (17).

- (17) a. *Chelsuw-ka na-eykey ka-la-ko myenglyenghay-t-a.*

철수가 나에게 가라고 명령했다.

'Chelsuw ordered me to go.'

- b. *Chelsuw-ka na-eykey, "ney-ka ka-la," lako myenglyenghay-t-ta.*

철수가 나에게, “네가 가라”, 라고 명령했다.

‘Chelsuw ordered me, “you go!”’

We can think of two ways of deriving the indirect discourse (17a) from its direct discourse (17b): (1) simply delete the subject *ney* of the quoted sentence in (17b), commas on both sides of the quoted sentence and both quotation marks, and replace the direct quotative particle *lako* with the indirect quotative particle *ko*; (2) first, transform the subject of quoted sentence into whatever the form of the indirect object of the matrix sentence (in this case *ney* will be replaced by *na*), and then apply Equi-NP Deletion transformation to delete the replaced subject of the quoted sentence. After changing *lako* into *ko*, we are able to generate the sentence (17a) from (17b). Furthermore, by ordering the rules (9) and (10) before the procedures stated above, we seem to account for the occurrences of the imperative ending *ela* and the propositive ending *ca* in sentences such as (11) and (12).

Note, however, that under this proposal we regard that all indirect discourses are derived from their respective direct discourses. Thus, the sentence (18) which is an instance of indirect discourses must be derived from its direct discourse counterpart.

(18) Yengho-ka Chelsuw-eykey *nay-ka salam-ul cuwkyet-ta-ko malhay-t-ta*.

영호가 철수에게 내가 사람을 죽였다고 말했다.

‘Yengho said to Chelsuw that I killed a man.’

The problem we encounter in sentences like (18) is how to specify the subject *nay* of the embedded indirect sentence in its direct discourse. Let us suppose that (19) is the direct discourse counterpart of (18).

(19) Yengho-ka Chelsuw-eykey, “*Hongbae-ka salam-ul cuwkye-t-ta*,” *lako malhay-t-ta*.

영호가 철수에게, “홍배가 사람을 죽였다”, 라고 말했다.

‘Yengho said to Chelsuw, “Hongbae killed a man.”’

The serious difficulty concerning the derivation of (18) from (19) arises from the fact that the sentence (18) is not the only sentence derivable from (19). (19) can also be the source of the sentence (20).

(20) Yengho-ka Chelsuw-eykey *Hongbae-ka salam-ul cuwkye-t-ta-ko malhay-t-ta*.

영호가 철수에게 홍배가 사람을 죽였다고 말했다.

‘Yengho said to Chelsuw that Hongbae killed a man.’

The sentence (18) is derivable from (19) only if the individual *Hongbae* is the speaker of the sentence (18), and neither *Yengho* nor *Chelsuw* is the listener of the sentence. On the other hand, (20) must be derived from (19) in case *Yengho*, *Chelsuw* or *Hongbae* is neither

the speaker nor the listener of the sentence. If the speaker is *Hongbae* and the listener is *Yengho*, then the sentence (21) must be derived from (19).

(21) *ney-ka Chelsuw-eykey nay-ka salam-ul cuwkye-t-ta-ko malhay-t-ta.*

네가 철수에게 내가 사람을 죽였다고 말했다.

'You said to Chelsuw that I killed a man.'

If, however, the speaker is Chelsuw, assuming that neither *Yengho* nor *Hongbae* is the listener, then (22) must result from (19).

(22) *Yengho-ka na-eykey Hongbae-ka salam-ul cuwkye-t-ta-ko malhay-t-ta.*

영호가 나에게 홍배가 사람을 죽였다고 말했다.

'Yengho said to me that Hongbae killed a man.'

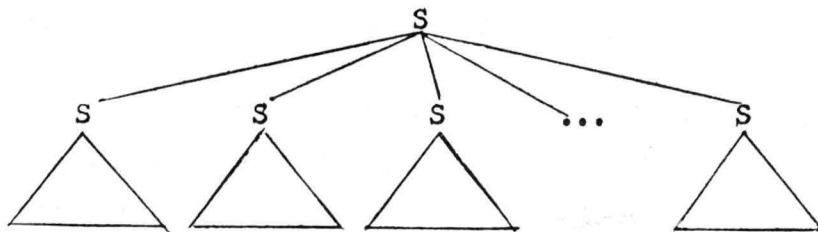
Exactly the same sort of problem arises when the indirect discourse contains the second person pronoun *ne* 'you'. Thus, at the present stage of transformational grammar, it is impossible to derive all indirect discourses from their unique direct discourse counterparts. If this is true, then we have to find some other way of handling the problems concerning the category of mood.

II. Problems

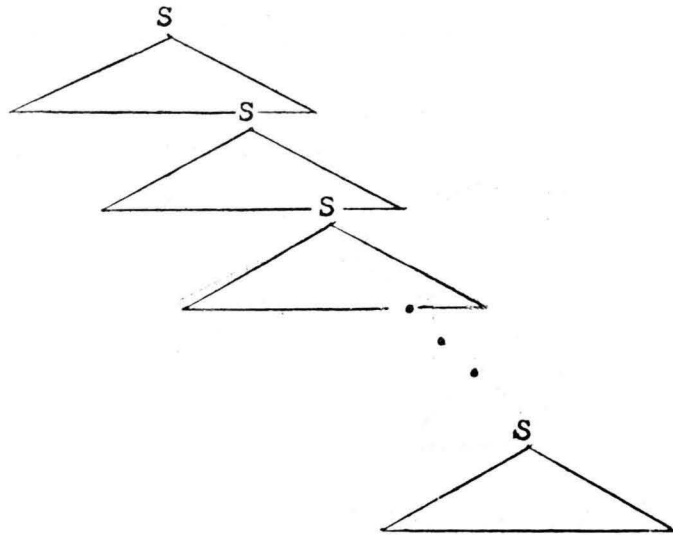
In the previous section, we have not really considered the problems of the base-generated category of mood, but rather the problems of constraining the occurrences of sentence endings. Here, I shall present several syntactic advantages we may gain if we somehow eliminate the category of mood from the base.

As I pointed out previously, natural languages contain various kinds of complex sentences. Generally, a human language produces a complex sentence either by conjoining two or more sentences or by embedding one sentence into another. Schematically, we can represent the conjoining and embedding processes as in (23) and (24), respectively.

(23)



(24)



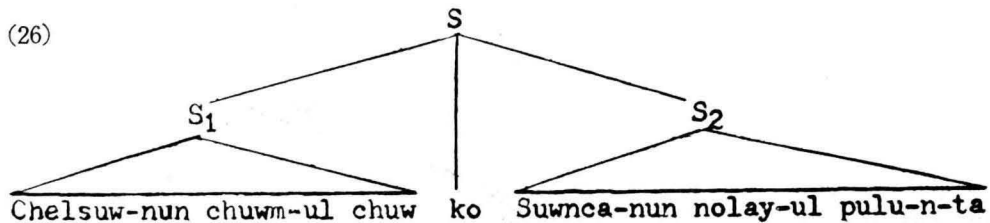
Let us first examine the conjoined sentence (25) whose simplified surface structure is (26).

(25) Chelsuw-nun chum-ul chuw-ko Suwnca-nun nolay-lul pulu-n-ta.

철수는 춤을추고 순자는 노래를 부른다.

'Chelsuw dances and Suwnca sings.'

(26)

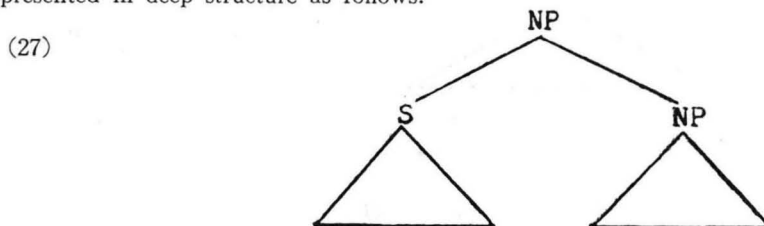


Note that the first conjunct S_1 does not dominate any of the four sentence endings. This means that, if the grammar of the language contains rules such as (5) and (6), we have to delete the category of mood of S_1 somewhere in the derivation of the sentence (25). Thus, the Conjunction Reduction Transformation (cf. Lee 1971) must be formulated in such a way that it never misses the deletion of the sentence endings of all preceding conjuncts except the last one. Of course, the deletion of the category of mood in all preceding conjuncts is justifiable in a sense that the deleted sentence endings are recoverable in most cases in terms of the sentence ending in the last conjunct. However, we make the Conjunction Reduction Transformation *ad hoc* by assigning an extra mission to it.

If we somehow eliminate the category of mood from the rule (5) and abandon the (6), and, furthermore, if we can empirically justify the procedure of introducing an appropriate

sentence ending in a sentence like (25), we can then automatically wipe out the problems stated in the preceding paragraph.

Secondly, let us consider a sentence which contains a noun phrase modified by a relative clause. Schematically, the noun phrase modified by a relative clause can be represented in deep structure as follows:

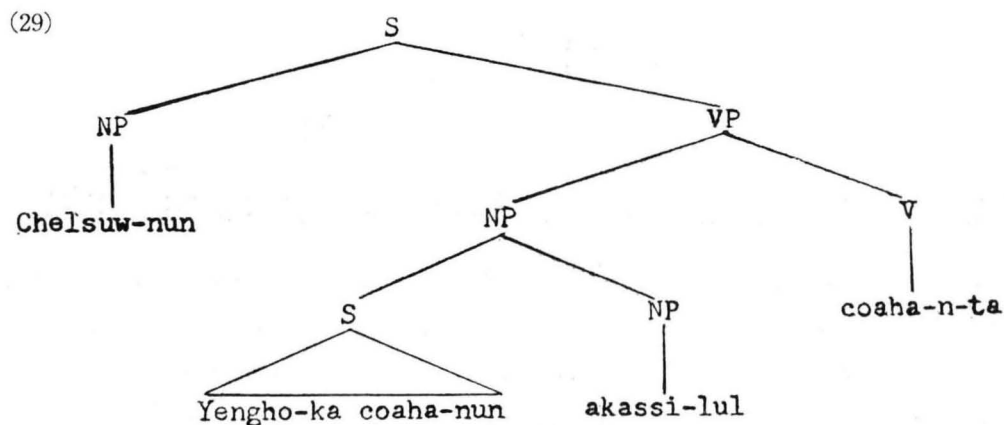


Thus, the surface structure of the sentence (28) can be shown as in (29) in its simplified form.

(28) Chelsuw-nun Yengho-ka coaha-nun akassi-lul coaha-n-ta.

철수는 영호가 좋아하는 아가씨를 좋아한다.

'Chelsuw likes the girl whom Yengho likes.'



The phrase marker (29) shows that in the relative clause of the sentence (28) there is no trace of sentence ending at all. Accordingly, if base rules such as (5) and (6) are included in the grammar of the language, the grammar must also contain another *ad hoc* transformation to delete whatever sentence ending appearing in the deep structure of a relative clause.

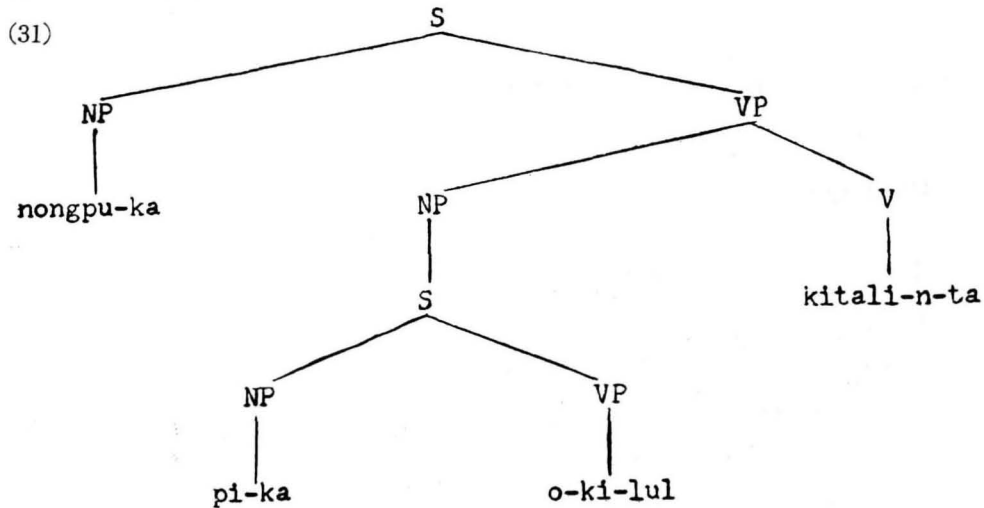
Lastly, let us consider an instance of nominalization (or complementation) in the language.

(30) nongpu-ka pi-ka o-ki lul kitali-n-ta.

농부가 비가오기를 기다린다.

'Farmers are waiting for rain to come.'

We make sentences like (30) by embedding a sentence (constituent sentence) in the position of object noun phrase of another sentence (matrix sentence) (we call this process object noun phrase complementation; see Lee 1970b: 117-68). The surface structure of (30) would be given as in (31).



As is the case in two previous instances, the embedded sentence of the sentence (30) does not contain any sentence ending. Someone would say the embedded sentence of (30) was originally a declarative sentence. In other words, it contained the declarative sentence ending in the deep structure, but the sentence ending was deleted by some transformation. The sentences in (32), however, reveal that the complement sentence of (30) is neither a declarative sentence nor an imperative sentence.

(32) a. na-nun Chelsuw-ka o-ci *anh*-ki-lul pala-n-ta.

나는 철수가 오지 않기를 바란다.

'I want Chelsuw not to come.'

b. na-nun Chelsuw-ka o-ci *mal*-ki-lul pala-n-ta.

나는 철수가 오지 말기를 바란다.

'I want Chelsuw not to come.'

Note, in particular, that both *ani* (which is supposed to occur only in a declarative sentence or a interrogative sentence) and *mal* (which is supposed to occur only in an imperative sentence and a propositive sentence) can appear in the embedded sentence of (32). This fact indicates that the complement sentence of (32) was not originally a declarative sentence,

but as far as the category of mood is concerned, we can not assign any particular sentence ending to it. If the grammar of the language includes (5) and (6) as its base rules, there is no non-*ad hoc* way of accounting for sentences such as (30) and (32).

we have so far discussed several problems occurring in the case that the category of mood is generated in the base of the grammar. If we believe that they constitute a legitimate reason for us to reconsider the handling of the category of mood in Korean transformational grammar, then we should find a way of explaining these problems in the most natural way.

III. Imperative

To find out the constraint imposed on the occurrence of the imperative sentence ending *ela*, let us consider the sentences of (33).

- (33) a. Han-i na-eykey ca-*la*-ko myenglyenghay-t-ta.

한이 나에게 자라고 명령했다.

'Han ordered me to sleep.'

- b. *Han-i na-eykey ca-t-*ta*-ko myenglyenghay-t-ta.

*한이 나에게 잤다고 명령했다.

'Han ordered me that I slept.'

- c. *Han-i na-eykey ca-ss-*nunya*-ko myenglyenghay-ss-ta.

한이 나에게 잤는냐고 명령했다.

'Han ordered me whether I slept.'

- d. *Han-i an-eykey ca-*ca*-ko myenglyenghay-ss-ta.

한이 나에게 자자고 명령했다.

'Han ordered me that I sleep.'

All four sentences of (33) are identical except that their embedded sentences contain different sentence endings. The reason that the sentences (33b-d) are ungrammatical is that the embedded sentences involve sentence endings other than the imperative sentence ending *ela*. Furthermore, the examples in (34) indicate that an embedded sentence must end in the imperative sentence ending if the main verb of the matrix sentence is a verb of 'ordering.'

- (34) a. sensayngnim-i na-eykey o-*la*-ko myenghay-as-ta.

선생님이 나에게 오라고 명했다.

'The teacher ordered me to come.'

- b. apeci-kkeyse na-eykey kongpuha-*la*-ko malssumhasye-ss-ta.

아버지께서 나에게 공부하라고 말씀하셨다.

'My father said for me to study.'

c. cuwngtaycang-i puha-eykey kongkyek-lul- ha-la-ko cisihay-ss-ta.

중대장이 부하에게 공격을 하라고 지시했다.

'The company commander ordered his men to attack.'

d. uisa-ka na-eykey ilnyenkan swi-la-ko chuwpngkohay-ss-ta.

의사가 나에게 일년간 쉬라고 충고했다.

'The doctor advised me to rest for a year.'

The further constraint on the occurrence of the imperative sentence ending *ela* is that the subject of the embedded sentence must be *coreferential* with the indirect object of the matrix sentence. The sentence (35) fails to meet the coreferentiality requirement between them. Thus, it is ungrammatical.

(35) *Yengho-ka Chelsuw-eykey Suwnca-ka ka-la-ko cisihay-ss-ta.

*영호가 철수에게 순자가 가라고 지시했다.

'yengho rodered Chelsuw that Sunca go.'

From the arguments we have presented so far, we can derive the following generalization about the grammatically correct usage of the imperative sentence ending *ela*.

(36) In Korean the construction *V+ela* is possible if the subject of the construction is coreferential with the indirect object of the next higher sentence whose main verb is a verb of 'ordering'.

Generalization (36) may be stated in terms of a transformational rule as follows:

Imperative Sentence Ending Insertion

X—NP—_s[NP—X]_s—V—X

1 2 3 4 5 9 (OBLIG)

→

1 2 3 4-ela 5 6

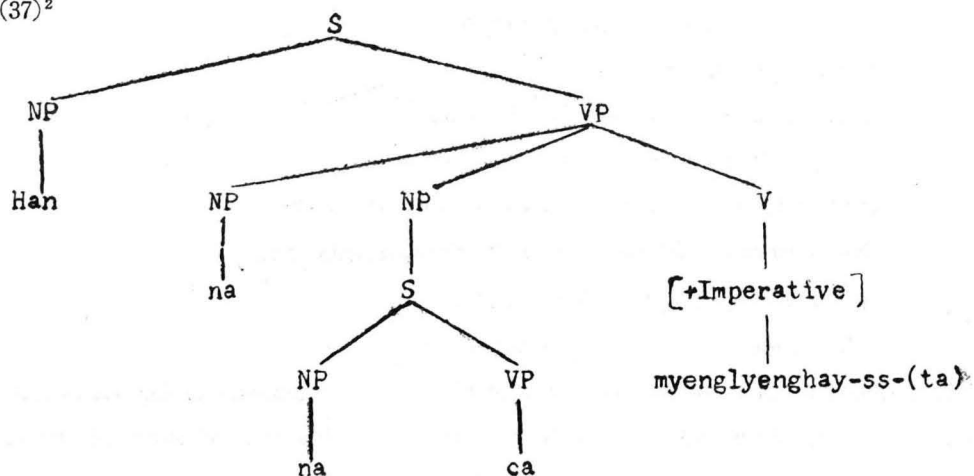
Condition: 5 contains [+Imperative].¹

2=3.

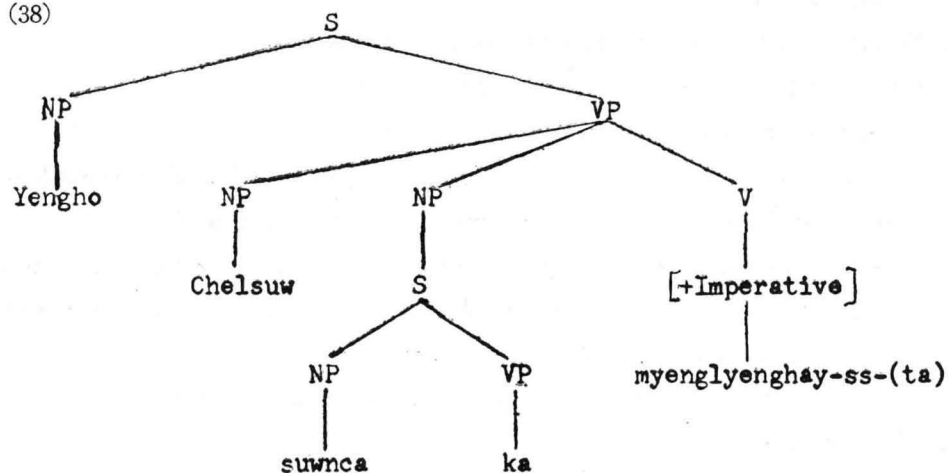
When we examine the Imperative Sentence Ending Insertion rule, it is clear that why the sentences in (33b-d) and (35) are ungrammatical. The underlying structures of (33b) and (35), for example, would be represented as in (37) and (38), respectively.

The proper analysis of the phrase marker (37) shows that the rule given above must

¹ The verbs of 'ordering' will be marked [+Imperative] in the lexicon. See Lee (1970b: 6-168) for further discussion of this subject.

(37)²

(38)



apply to it. Nevertheless, the embedded sentence of (33b) contains the declarative sentence ending *ta* which is the element causing the sentence to be ungrammatical. In (38), however, the subject of the embedded sentence is not identical to the indirect object of the matrix sentence. Therefore, the rule must not have applied to it.

IV. Propositive

As to the constraint on the occurrence of the propositive sentence ending *ca*, let us consider

² Note that the underlying structural representation (37) does not contain the specification of the subject, object and indirect object markers. See Lee (1970b) where I proposed that those markers be introduced by transformational rules.

the following sentences.

- (39) a. Yengho-ka Chelsuw-eykey kongpu-lul ha-*ca*-ko ceyanhay-ss-ta.

영호가 철수에게 공부를 하자고 제안했다.

'Yengho suggested to Chelsuw they (Yengho and Chelsuw) do a study.'

- b. *Yengho-ka Chelsuw-eykey kongpu-lul ha-n-*ta*-ko ceyanhay-ss-ta.

영호가 철수에게 공부를 한다고 제안했다.

'Yengho suggested to Chelsuw that they did a study.'

- c. *Yengho-ka Chelsuw-eykey kongpu-lul ha-*nunya*-ko ceyanhay-ss-ta.

*영호가 철수에게 공부를 하느냐고 제안했다.

'Yengho suggested to Chelsuw whether they did a study.'

- d. *Yengho-ka Chelsuw-eykey kongo-lul ha-*la*-ko ceyanhay-ss-ta.³

영호가 철수에게 공부를 하라고 제안했다.

'Yengho suggested to Chelsuw that they do a study.'

The sentences in (39) show that, in order for the propositive sentence ending *ca* to occur in a sentence, the following conditions must be satisfied: (A) the main verb of the matrix sentence must be a verb of 'suggesting' (cf. (40)): (B) the subject sentence under question must be the combination of the subject and the indirect object of the matrix sentence (cf. (41)).

- (40) a. nay-ka Mica-eykey mikuwk-ey ka-*ca*-ko kwenhay-ss-ta.

내가 미자에 미국에 가자고 권했다.

'I suggested to Mica that we go to the U. S.'

- b. Chelsuw-ka na-eykey totuwkcil-lul ha-*ca*-ko ceyuihay-ss-ta.

철수가 나에게 도둑질을 하자고 제의했다.

'Chelsuw proposed to me that we steal.'

- (41) *Chelsuw-ka na-eykey Yengho-ka ka-*ca*-ko ceyanhay-ss-ta.

*철수가 나에게 영호가 가자고 제안했다.

'Chelsuw suggested to me that Yengho go.'

These constraints can be stated as follows:

- (42) In Korean the construction *V+ca* is possible if the subject of the construction is coreferential with the combination of the subject and the indirect object of the higher sentence whose main verb is a verb of 'suggesting'.

³ (39d) is grammatical when it means 'Yengho suggested to Chelsuw to do a study'. This interpretation, however, is irrelevant to the present argument.

(42) may be restated as in the following transformational rule.

Propositive Sentence Ending Insertion

$X-NP-NP-s[NP-X]_s -V-X$

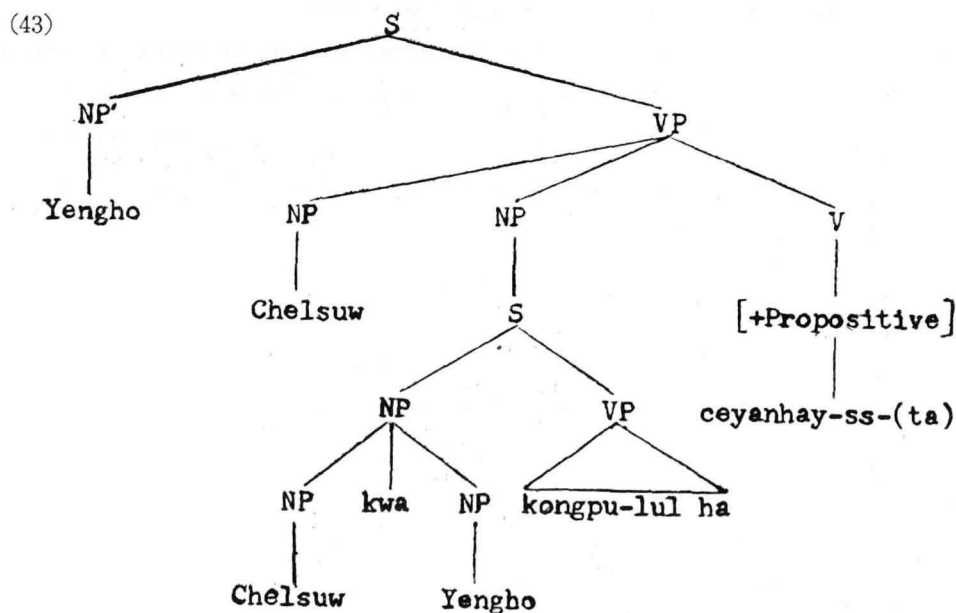
1 2 3 4 5 6 7 (OBLIG) \rightarrow

1 2 3 4 5-ca 6 7

Condition: 6 contains[+Propositive].

2 Plus 3=4.

Now, let us examine the reasons why sentences in (39b-d) and (41) are ungrammatical. The ungrammaticality of (41) is due to the violation of the coreferentiality constraint of the propositive sentence ending insertion rule. The sentences in (36b-d), however, are ungrammatical because their embedded sentences contain sentence endings other than the propositive sentence ending *ca*. The underlying structure of (39) would be given as in (43).



The structural analysis of (43), meeting the structural description of the propositive sentence ending rule, demonstrates why the embedded sentence of (39a) must contain *ca*, but not other sentence endings,

V. Interrogative

Let us consider the following sentences.

- (44) a. Chelsuw-ka Yengho-ka o-ass-nunya-ko mul-ess-ta.

철수가 영자가 왔느냐고 물었다.

'Chelsuw asked whether Yengho came.'

- b. *Chelsuw-ka Yengho-ka o-ass-ta-ko mul-ess-ta.

*철수가 영자가 왔다고 물었다.

'Chelsuw asked that Yengho came.'

- c. *Chelsuw-ka Yengho-ka o-la-ko mul-ess-ta.

*철수가 영자가 오라고 물었다.

'Chelsuw asked that Yengho come.'

- d. *Chelsuw-ka Yengho-ka o-ca-ko mul-ess-ta.

*철수가 영자가 오자고 물었다.

'Chelsuw asked that Yengho come.'

The sentences in (44) are identical except that (4-4a) contains the interrogative sentence ending, whereas the ungrammatical sentences (44b-d) contain non-interrogative sentence endings. This fact reveals that a sentence must end in the interrogative sentence ending *nunya*, when it is embedded in a sentence whose main verb is a verb of 'asking.' (Also, see (45)).

- (45) a. *Chelsuw-ka Yengca-cykey o-ass-nunya-ko myenglyenghay-ss-ta.

*철수가 영자에게 왔느냐고 명령했다.

'Chelsuw ordered Yengca whether she came.'

- b. *Chelsuw-ka Yengca-ka o-ass-nunya-ko malhay-ss-ta.

*철수가 영자가 왔느냐고 말했다.

'Chelsuw said whether Yengca came.'

On the bases of the arguments presented above, the following generalization may be given for the grammatical usage of the interrogative sentence ending.

Interrogative Sentence Ending Insertion

$X - _s [NP - VP] _s - V - X$

1 2 3 4 5 (OBLIG)

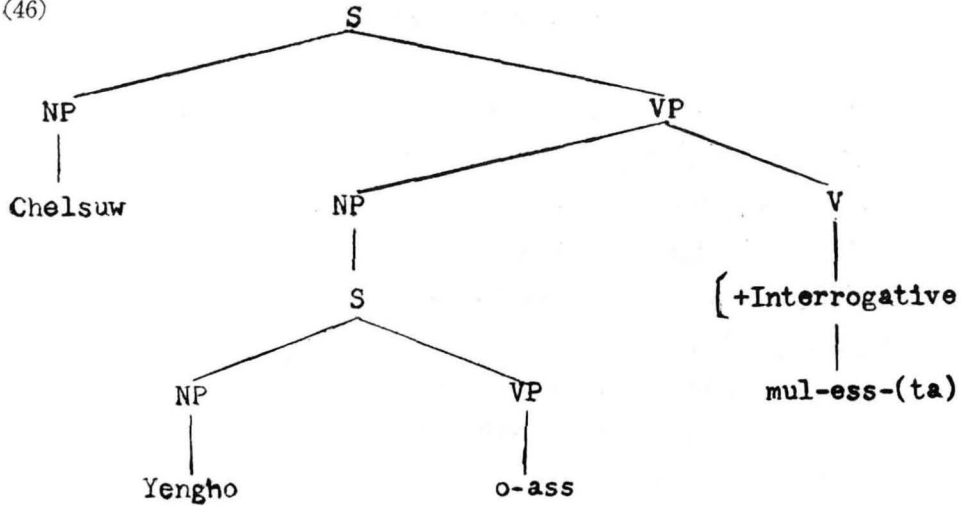
1 2 3-nunya 4 5

Condition: 4 contains [+Interrogative].

To see how the rule given above works on a phrase marker, let us consider the phrase marker (46) that is the deep structure of the sentences in (44).

The proper analysis of the phrase marker (46) satisfies the structural description of the

(46)



interrogative sentence ending insertion rule. Thus, the sentences (44b-d), having (46) as their underlying structure, are ungrammatical.

VI. Declarative

In sections III, IV, and V, we have demonstrated that a verb of 'ordering' has an imperative sentence as its complement, a verb of 'suggesting' a propositive sentence, and a verb of 'asking' an interrogative sentence as its complement. In this section, we will demonstrate that a verb of 'saying' require that the complement be a declarative sentence.

(47) a. Hongbae-ka salam-lul cuwky-ess-ta-ko kopaykhay-ss-ta.

홍배가 사람을 죽였다고 고백했다.

'Hongbae confessed that he killed a man.'

b. Chelsuw-ka Hongbae-ka tolao-ass-ta-ko malhay-ss-ta.

철수가 홍배가 돌아왔다고 말했다.

'Chelsuw said that Hongbae returned.'

c. Chelsuw-ka na-wa kyelhonha-keyss-ta-ko yaksokhay-ss-ta.

철수가 나와 결혼하겠다고 약속했다.

'Chelsuw promised to marry me.'

(48) a. *Hongbae-ka salam-lul cuwky-ess $\left\{ \begin{smallmatrix} \text{nunya} \\ \text{ela} \\ \text{ca} \end{smallmatrix} \right\}$ -ko kopaykhay-ss-ta.

*홍배가 사람을 죽였 $\left\{ \begin{smallmatrix} \text{느냐} \\ \text{어라} \\ \text{자} \end{smallmatrix} \right\}$ 고 고백했다.

b. *Chelsuw-ka Hongbae-ka tolao-ass $\left\{ \begin{smallmatrix} \text{nunya} \\ \text{ela} \\ \text{ca} \end{smallmatrix} \right\}$ -ko malhay-ss-ta.

*철수가 홍배가 돌아왔 $\left\{ \begin{smallmatrix} \text{느냐} \\ \text{어라} \\ \text{자} \end{smallmatrix} \right\}$ 고 말했다.

The examples in (47) and (48) indicate that, whenever a sentence is embedded in a sentence whose main verb is a verb of 'saying', the embedded sentence must end in the declarative sentence ending *ta*. This fact can be stated as follows:

Declarative Sentence Ending Insertion

$X -_s [NP - VP]_s - V - X$

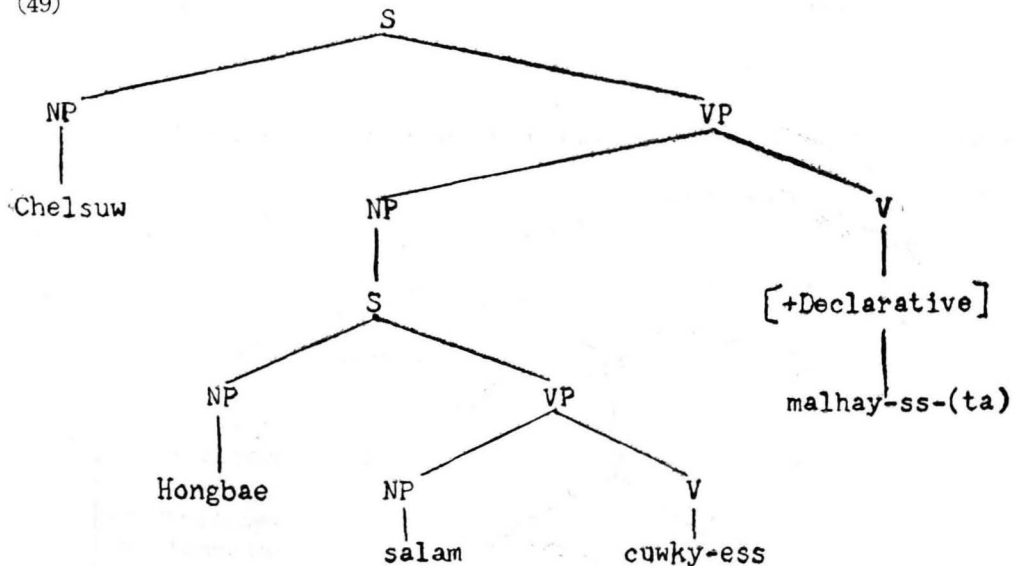
1 2 3 4 5 (OBLIG)

1 2 3-ta 4 5

Condition: 4 contains [+Declarative].

The ungrammaticality of (48b), for example, is due to the fact that the underlying structure is (49) from which only the sentence (47b) is derivable.

(49)



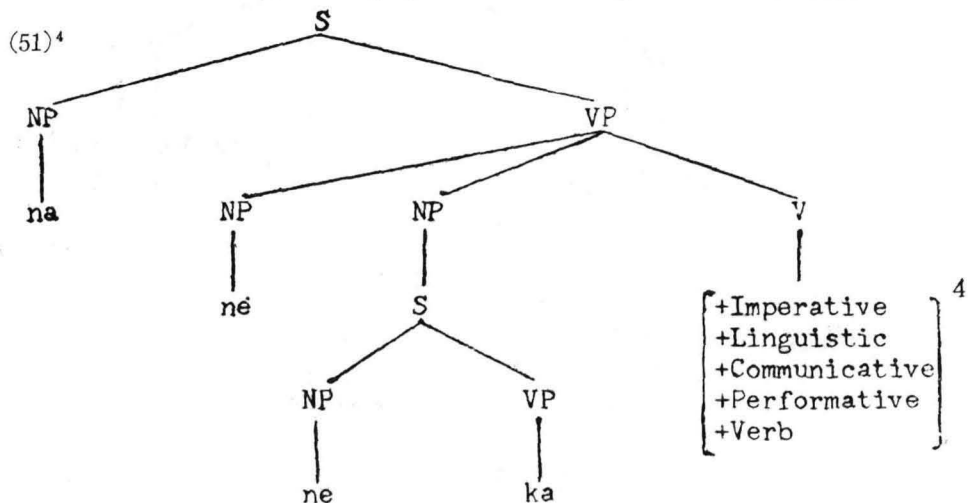
The proper analysis of (49) shows that the embedded sentence must contain the declarative sentence ending *ta*. Thus, the sentences in (48b) are ungrammatical, because their embedded sentences end in non-declarative sentence endings.

VII. Conclusion

I have presented so far four transformational rules by which the declarative, interrogative, imperative, and propositive sentence endings are inserted into sentences. Since a phrase marker must contain at least two S nodes in order for a sentence ending insertion rule to apply, the question is raised as to how to introduce the appropriate sentence endings into simple sentences such as (50) which do not have any overt higher sentences.

- (50) a. Hongbae-ka ttena-ss-ta.
 홍배가 떠났다.
 'Hongbae left.'
- b. Hongbae-ka ttena-ss-nunya?
 홍배가 떠났느냐?
 'Did Hongbae leave?'
- c. ney-ka ka-la.
 네가 가라.
 'You go!'
- d. uwli-ka ka-ca.
 우리가 가자.
 'Let's go.'

See Lee (1970:6-116) in which I proposed four kinds of performative sentences—Declarative,

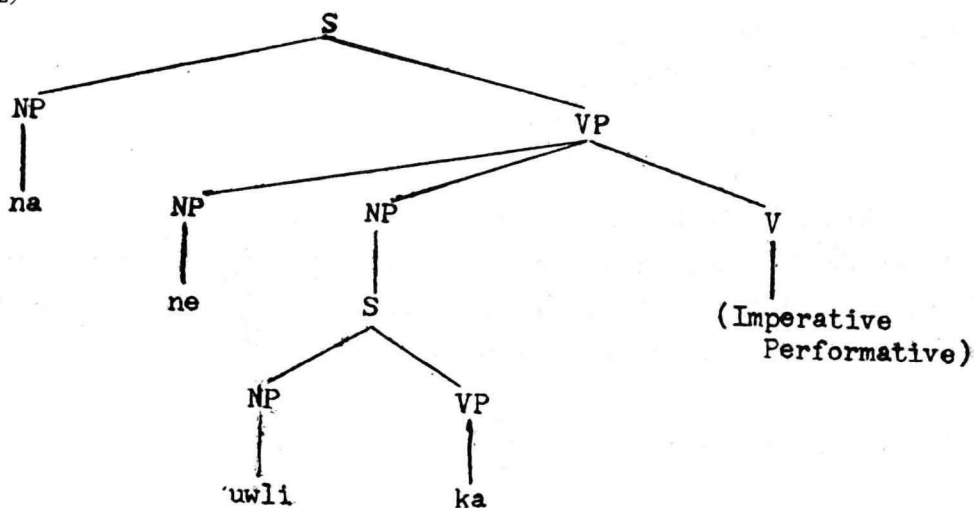


⁴ See Ross (1970) and Lee (1970b) for feature specification.

Interrogative, Imperative, and propositive—each of which superordinates their respective sentence types. The *declarative performative sentence*, for example, superordinates a sentence signifying a 'declaration', and it consists of a first person subject, a second person indirect object and the declarative verb *malha* 'say'. In other words, I argued that the sentences in (50) are not simple sentences but embedded ones in their respective performative sentences. For example, the superficially simple imperative sentence (50c) will be represented in the deep structure as in (51).

Since the *Imperative Sentence Ending Insertion* rule (cf. p. 13) requires that the subject of an embedded sentence be coreferential with the indirect object of the higher sentence whose main verb is a verb of 'ordering', a sentence that contains other than the second person pronoun as its subject cannot become an imperative sentence. Note, in particular, that the imperative performative sentence contains the second person pronoun indirect object. Thus, the ungrammaticality of the sentence (7b) is due to the fact that it is represented in the deep structure as in (52).

(52)



Notice that the *Imperative Sentence Ending Insertion* rule is inapplicable to (52), because the subject of the embedded sentence is not coreferential with the indirect object of the performative sentence.

Another question is raised as to the choice of the basic forms of sentence endings. As the four sentence ending insertion rules formulated in the previous sections show, I have chosen *ta*, *nunya*, *ela*, and *ca* the basic endings of declarative, interrogative, imperative, and

propositive sentences, respectively. It is quite feasible for the rules to introduce some sorts of cover symbols such as Dec, Int, Imp, and Prop, or some other forms of sentence endings. The reason that I choose *ta*, *nunya*, *ela*, and *ca* as the basic sentence endings is the over-all economy of the grammar.

Consider the sentences in (53) whose embedded sentences are declarative sentences.

$$(53) \text{ Chelsuw-ka Hongbae-ka salam-ul cuwky-ess } \left\{ \begin{array}{l} ta \\ *ne \\ *o \\ *upnita \\ *e \end{array} \right\} \text{ ko malhay-ss-ta.}$$

$$\text{철수가 홍배가 사람을 죽였 } \left\{ \begin{array}{l} 다 \\ *네 \\ *오 \\ *읍니다 \\ *어 \end{array} \right\} \text{ 고 말했다.}$$

'Chelsuw said that Hongbae killed a man.'

Note that embedded declarative sentence must end in only *ta* among various declarative sentence endings. Suppose that the *Declarative Sentence Ending Insertion* rule (of. p. 28) is reformulated as follows:

$$\begin{array}{cccccc} X \text{---}_s [\text{NP} \text{---} \text{VP}]_s & \text{---} & \text{V} \text{---} & X \\ 1 & 2 & 3 & 4 & 5 & (\text{OBLIG}) \\ 1 & 2 & 3r\text{Dec} & 4 & 5 \end{array}$$

Condition: 4 contains [+Declarative].

It goes without saying that the grammar needs two more rules: one for the case of (53) in which the embedded sentence must end in *ta*, and another for the case of (54) in which a sentence may end in any one of the declarative sentence endings.

$$(54) \text{ Hongbae-ka salam-ul cuwky-ess } \left\{ \begin{array}{l} ta \\ ne \\ o \\ upnita \\ e \end{array} \right\}.$$

$$\text{홍배가 사람을 죽였 } \left\{ \begin{array}{l} 다 \\ 네 \\ 오 \\ 읍니다 \\ 어 \end{array} \right\}.$$

'Hongbae killed a man'.

Sine this is also the case in interrogative, imperative, and propositive sentences, it further complicates the grammar of the language. If, however, we treat *ta* as the basic declarative sentence ending, for example, only one more rule is needed for sentences like (54). The

process of deriving the other forms of a sentence ending from its basic one is called the system of 'speech levels'. See Lee(1970b: 87-94) about the proposal concerning the rules for the speech levels of the language. I proposed there the speech level rules be applicable only to the performative sentence level, thus preventing them from generating ungrammatical strings such as (53).

Next, let us consider how the present proposal accounts for the sentences whose embedded sentences do not involve any sentence endings as in (28) and (30), which I am going to repeat here as (55) and (56), respectively.

- (55) Chelsuw-nun *Yengho-ka coaha-nun* akassi-lul coaha-n-ta.

철수는 영호가 좋아하는 아가씨를 좋아한다.

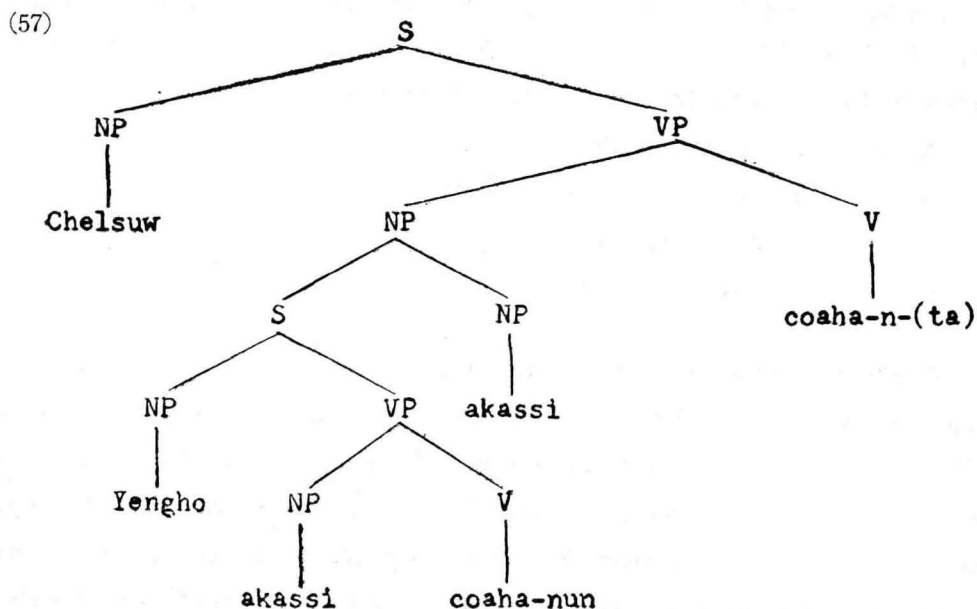
'Chelsuw likes the girl whom Yengho likes.'

- (56) nongpu-ka *pi-ka o-ki-lul* kitali-n-ta.

농부가 비가 오기를 기다린다.

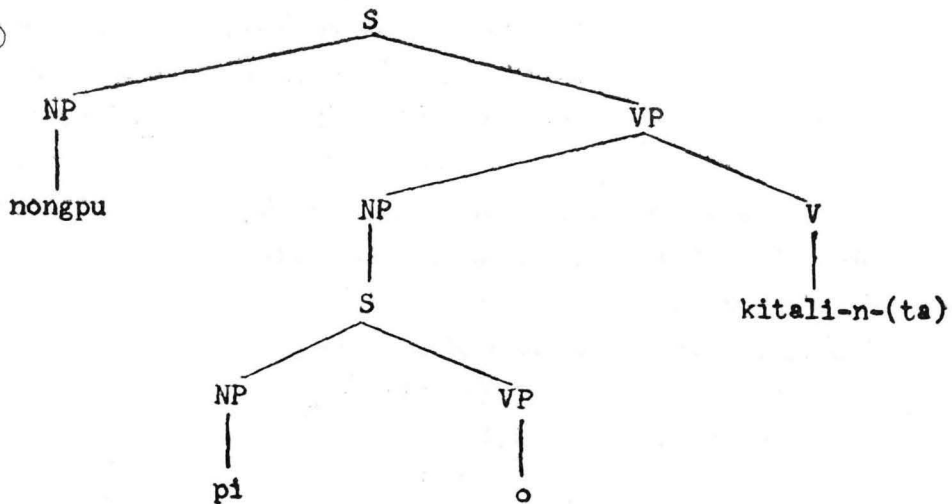
'Farmers are waiting for rain to come.'

We would represent the underlying structures of (55) and (56) as in (57) and (58), respectively, in their simplified forms.



The proper analyses of the phrase markers (57) and (58) do not meet the structural descriptions of sentence ending rules: (57) which contains a relative clause cannot be analyzed

(58)



to meet the structural analyses of any of the four sentence ending insertion rules; in (58) the main verb of the matrix sentence is a verb of 'wishing', and thus it will not be marked in the lexicon [+Declarative], [+Imperative], [+Interrogative], or [+Propositive]. This is to say that none of the sentence ending insertion rules is applicable to (57) and (58).

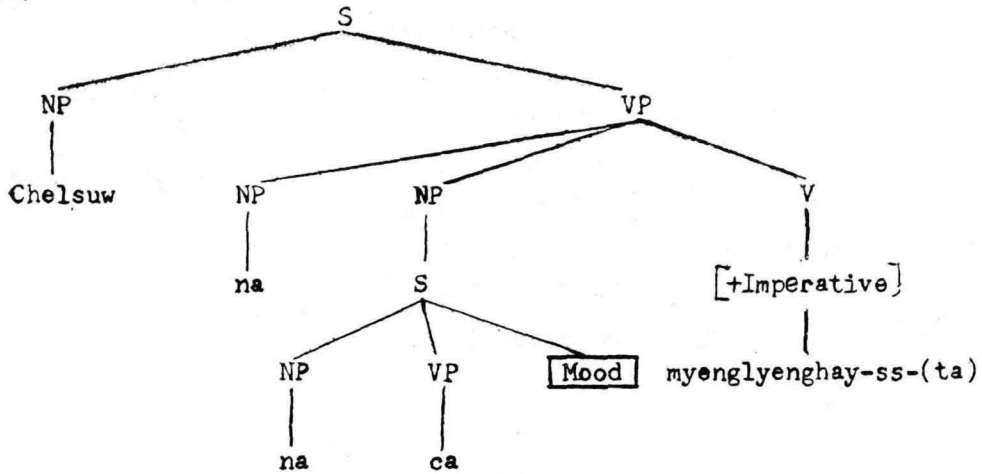
I am going to conclude the paper by presenting an alternative way of treating the category of mood which might save base rules such as (5) and (6). Let us suppose that we reformulate the rule for the imperative sentence ending insertion as follows:

$X-NP \rightarrow_s [NP-X-Mood]_s -V-X$
 1 2 3 4 5 6 7 (OBLIG)
 1 2 3 4 Imp 6 7
 Condition: 6 contains [+Imperative].
 2=3.

The other three sentence ending insertion rules can be reformulated in the same way.

The rule given above states that the category of mood is generated in the base component of the grammar, but it will be replaced by Imp in the specified environment. Note, however, that (5) and (6) are base rules, but the rule above is a transformational rule. This means that, before we apply the rule given above to a certain phrase marker, (5) and (6) must be fully applied to it. In other words, the transformational rule is not applicable to a phrase marker such as (59) which cannot be the deep structure of any sentence in the language. In order for it to be the underlying structure of a sentence, the node *Mood* must dominate Declarative, Interrogative, Imperative, or Propositive, which in turn dominates their respective terminal elements.

(59)



Let us suppose that the node Mood in (59) dominates 'Declarative' which dominates *ta*. The rule given above is able to replace the 'Declarative' node with the 'Imperative' node which dominates *ela*. Although it may produce a grammatical sentence there is no justification for claiming that the node Mood must dominate 'Declarative.' It might as well dominate 'Interrogative' or something else. Furthermore, it is clearly ad hoc that a rule replaces 'Declarative' with 'Imperative.' Then, someone may claim that the node Mood always dominates 'Imperative' in the environment specified in the phrase marker (59). This means that we do not need any sentence ending insertion rules, because they will be always applied to phrase markers *vacuously*. Thus, this claim, explaining nothing about the category of mood in the grammar, takes us back where we started.

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